CALIFORNIA ENERGY COMMISSION

1516 Ninth Street Sacramento, California 95814

Main website: www.energy.ca.gov



In the matter of,)	Docket No. 13-IEP-1D
2013 Integrated Energy Policy Report (2013 IEPR)))	WORKSHOP RE: Electricity Infrastructure
)	Planning/Reliability

AMENDED

Workshop on Southern California Electricity Infrastructure and Reliability Issues

As part of the 2013 Integrated Energy Policy Report (2013 IEPR), the California Energy Commission's (Energy Commission) Chair will conduct a workshop on the preliminary reliability plan for Los Angeles Basin and San Diego prepared by staff of the Energy Commission, the California Public Utilities Commission (CPUC), and the California Independent System Operator (California ISO) in consultation with other state agency staff and the affected utilities. Since the steam generator tube rupture in January of 2012 in Unit 3 of San Onofre Nuclear Generation Station (San Onofre), the Governor's Office has lead a coordinated effort to ensure reliability of the electricity grid in Southern California for the summer of 2012 and 2013. On June 7, 2013, Southern California Edison announced the closure of San Onofre. The genesis of the preliminary reliability plan was the announcement of the permanent shut down, and the agency staff working group stemmed from the previously coordinated summer reliability work. Commissioners from the Energy Commission, commissioners from the CPUC, and executives from the California Air Resources Board, the State Water Resources Control Board, the California ISO, the South Coast Air Quality Management District and other agencies may also attend.

MONDAY, SEPTEMBER 9, 2013

Beginning at 9:00 a.m.
California Energy Commission
Hearing Room A
1516 9th Street
Sacramento, California 95814
(Wheelchair Accessible)

Remote Access Available by Computer or Phone via WebEx[™] (Instructions below)

This workshop will review the joint agency staff effort to develop a plan to satisfy reliability needs without San Onofre and once through cooling power plant retirements. Following the workshop, the agency principals will review stakeholder feedback and determine changes to the plan. The IEPR Lead Commissioner will also determine the extent to which this issue

requires further examination in the 2013 IEPR and the extent to which the various ongoing efforts among the participating agencies are sufficient. The CPUC commissioners assigned to various proceedings will determine how they will address these topics within existing or in new proceedings.

Agenda

The purpose of this workshop is to receive a presentation of the staff draft plan from the management at the state agencies concerning reliability and electricity infrastructure needs resulting from the closure of San Onofre and the retirement of other facilities using once-through cooling (OTC) technologies. Southern California represents a unique situation: substantial OTC capacity must be replaced to satisfy state policies, but it is in an air shed with the nation's tightest criteria pollutant permitting regime. Technical staff of state government agencies, balancing authorities, and other experts provided results for several electricity infrastructure planning studies and a panel of recognized stakeholder organizations provided reactions to these presentations at a joint Energy Commission and CPUC workshop held on July 15, 2013.

This workshop update will discuss including, but not limited to the general approach used by the technical staff to develop a preliminary plan, and the following specific elements:

- The near term actions that should be taken as a result of the loss of San Onofre to continue to assure local and regional reliability in Los Angeles and San Diego, while longer-term infrastructure options are implemented.
- The range of need for repowered or new generating capacity to replace San Onofre and fossil OTC facilities.
- Air quality limitations on the amount and/or type of repowered or new generating capacity that can be permitted in the South Coast Air Basin under existing rules of the Southern California Air Quality Management District.
- The extent to which preferred resource types as exemplified by the 2003 Energy
 Action Plan's loading order (energy efficiency, demand response, and renewable)
 and/or transmission (new lines, upgraded system elements or undersea cables
 augmenting the existing transmission system) can substitute for advanced natural
 gas generating units in meeting various metrics that define reliability.
- Enhanced monitoring of the implementation progress and energy savings from demand-side initiatives to determine whether "off ramps" to implement other solutions should be triggered.
- Development of conditional permits for construction and conditional procurement authority for advanced natural gas turbine projects that can be quickly developed if "off ramps" are triggered.
- The need for extraordinary decision making processes, if any, to implement the
 preliminary plan's recommendations that would augment the existing approval
 processes of the Energy Commission, CPUC and California ISO for electricity
 infrastructure.

Background

Public Resources Code section 25301 directs the Energy Commission to regularly assess all aspects of energy demand and supply. These assessments provide the foundation for analysis and recommendations to the Governor, Legislature, and other agencies for energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety. The Energy Commission has studied the issues of OTC impact mitigation and constraints on fossil power plant development in several recent IEPR proceedings. The *2011 IEPR*¹ stated:

Reducing the impacts on the marine and estuarine environments from the use of OTC technologies in older power plants and the scarcity of emission offsets for new fossil power plants are two of the most important challenges facing the electricity generating industry. To reduce impacts, many of the owners of California's aging power plants are choosing to retire rather than make capital investments in the facility, causing a need for new capacity to satisfy peak demand and appropriate reserves. However, licensing new power plants is difficult, given the scarcity and corresponding cost of offsets required to avoid harmful impacts on air quality. Even repowering at the site of an aging power plant has its challenges. So, while policies to reduce the use of OTC are increasing the demand for new power plants, air quality constraints are restricting the development of fossil fuel power plants. This complexity is especially apparent in those areas of the state where existing air quality fails to satisfy ambient standards. The South Coast Air Basin, for example, is experiencing the full effects of these opposing forces. To satisfy local capacity requirements (LCR) and help integrate variable renewable generation, the region will have to replace some of its older capacity with dispatchable, flexible fossil power plants when existing OTC power plants retire. The 2009 Integrated Energy Policy Report discussed the South Coast Air Basin's situation in detail and made recommendations to address the challenges, but uncertainties continue. (2011 IEPR, Chapter 9)

Building off this problem statement, the *2012 IEPR Update* noted that the two nuclear units at San Onofre had gone offline in January 2012 and that the possible need to replace these facilities exacerbates the pre-existing tension between OTC and air quality policies. Noting the institutional coordination challenges in resolving this topic, the *2012 IEPR Update*² said:

Southern California has more different decision makers overseeing various pieces of the electricity infrastructure than any other region in California. Southern California Edison (SCE) is the largest single utility in the region and is regulated by the California Public Utilities Commission (CPUC). There are also many other smaller municipal utilities located within the Southern California portion of the California Independent System Operator (California ISO) balancing authority area that are governed by their own local governing boards with their own methods for satisfying statewide laws or energy policies. The Los Angeles balancing authority area, which is operated independently of the California ISO, includes the nation's largest

² http://www.energy.ca.gov/2012_energypolicy/index.html

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¹ http://www.energy.ca.gov/2011_energypolicy/index.html

municipal utility, the Los Angeles Department of Water and Power (LADWP), and two other small public utilities. SCAQMD is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties and faces more challenges than any other local air district in California in achieving compliance with the federal Clean Air Act. The agency has substantial authority to implement control measures that shift fuel-based combustion processes into alternative technologies that increase demand for electricity. SCAQMD and the California Air Resources Board (ARB) have begun an unprecedented effort to coordinate their development of the next *State Implementation Plan* for stationary and mobile emission sources, and to address both air emission standards and GHG goals. Finally, many of the generating plants required to comply with the SWRCB's OTC policy are located in Southern California (2012 IEPR Update, Chapter 4).

Since the 2012 IEPR Update, considerable progress in coordinating reliability studies has been achieved among the key agencies and other organizations. The effort to develop this preliminary plan has further accentuated such collaborative efforts at the technical staff level. A public review of the staff preliminary plan provides an opportunity for decision-makers within the participating organizations to determine whether the strategy put forward is sound, whether existing processes among the participating agencies are sufficient to implement the direction within the draft report, or whether extraordinary procedural mechanisms must be developed to implement the action plan from a final agency Principals' plan.

Representatives of stakeholder organizations and the public will have an opportunity to review the staff preliminary reliability plan and to provide comments at the workshop.

Public Comment

Oral Comments. The IEPR Lead Commissioner will accept oral comments during the workshop. Comments may be limited to three minutes per speaker. Any comments will become part of the public record in this proceeding.

Written Comments. Written comments should be submitted to the Dockets Unit by **September 23, 2013**. Written comments will also be accepted at the workshop, however, the Energy Commission may not have time to review them before the conclusion of the workshop. All written comments will become part of the public record of this proceeding. Additionally, written comments may be posted to the Energy Commission's website.

The Energy Commission encourages comments by e-mail. Please include your name and any organization name. Comments should be in a downloadable, searchable format such as Microsoft® Word (.doc) or Adobe® Acrobat® (.pdf). Please include the docket number 13-IEP-1D and indicate Electricity Infrastructure Issues in the subject line. Send comments

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³ Air Resources Board and South Coast Air Quality Management District, *Vision for Clean Air: A Framework for Air Quality and Climate Planning*, http://www.aqmd.gov/aqmp/2012aqmp/.

to **docket@energy.ca.gov** and copy the technical lead staff at **Mike.Jaske@energy.ca.gov**.

If you prefer, you may send a paper copy of your comments to:

California Energy Commission Dockets Office, MS-4 Re: Docket No. 13-IEP-1D 1516 Ninth Street Sacramento, CA 95814-5512

Public Adviser and Other Commission Contacts

The Energy Commission's Public Adviser's Office provides the public assistance in participating in Energy Commission proceedings. If you want information on how to participate in this forum, please contact the Public Adviser's Office at (916) 654-4489 or toll free at (800) 822-6228, or by e-mail at PublicAdviser@energy.ca.gov.

If you have a disability and require assistance to participate, please contact Lou Quiroz at (916) 654-5146 or by email at LQuiroz@energy.ca.gov at least five days in advance.

Media inquiries should be sent to the Media and Public Communications Office at (916) 654-4989, or by email at mediaoffice@energy.ca.gov.

If you have questions on the technical subject matter of this meeting, please contact Mike Jaske at (916) 654-4777 or by email at Mike.Jaske@energy.ca.gov. For general questions regarding the IEPR proceeding, please contact Lynette Green, IEPR project manager, at (916) 653-2728 or by email at Lynette.Green@energy.ca.gov.

The service list for the 2013 IEPR is handled electronically. Notices and documents for this proceeding are posted to the Energy Commission website at [www.energy.ca.gov/2013_energypolicy/index.html]. When new information is posted, an e-mail will be sent to those on the energy policy e-mail list server. We encourage those who are interested in receiving these notices to sign up for the list server through the website at www.energy.ca.gov/listservers/index.html.

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Availability of Documents

The agenda for the workshop is available at http://energy.ca.gov/2013_energypolicy/documents/#09092013. Also, the preliminary plan and workshop presentation(s) for this meeting will be available the week of September 3, 2013.

Date: August 30, 2013

ANDREW MCALLISTER, Ph.D. Lead Commissioner 2013 Integrated Energy Policy Report

Mail Lists: energypolicy, electricity